

### **ABSTRACT OF THE DISCLOSURE**

Novel flat plate solar panels are disclosed, which, using low profile multiple axes tracking, keep the surface of each flat plate panel upon which rays of the sun are impinged essentially perpendicular to those rays enabling a higher rate of conversion to electrical energy and a long interval each day during which conversion of sunlight to electricity is accommodated. Side peripheral sunlight deflectors redirect rays of sunlight perpendicular to the face of the flat plate panel but directly adjacent to and somewhat out of alignment with the impingement surface of the flat plate panels upon the impingement surfaces thereby concentrating a greater amount of sunlight to produce a greater quantity of electricity. A cooling system for the flat plate panels, using circulated fluid is disclosed whereby the thermal energy so obtained may be used to perform work to make the system more cost effective.